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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,440	11/20/2003	Michael Thomas Benhase	TUC920030133US1	2980
46917 7590 04/03/2007 KONRAD RAYNES & VICTOR, LLP. ATTN: IBM37 315 SOUTH BEVERLY DRIVE, SUITE 210 BEVERLY HILLS, CA 90212			EXAMINER SCHNEIDER, JOSHUA D	
			ART UNIT 2182	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/03/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/719,440	Applicant(s) BENHASE ET AL.	
	Examiner Joshua D. Schneider	Art Unit 2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
- 2) ☒ Certified copies of the priority documents have been received in Application No. _____.
- 3) ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/12/05; 11/20/03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 7, 10, 27, and 30 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. No useful tangible result comes to fruition as a result of making determinations about an identifier. The determinations are essentially entirely mental steps, and require no use, storage, or transmission for later use that make them in any way useful, because they are not being used.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2, 4-8, 10-12, 14-18, 20-22, 24-28, and 30 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 7,051,121 to Ohno et al. 3, 9, 13, 19, 23, and 29
5. With regards to claims 1, 11, and 21, Ohno teaches receiving, at a first storage unit, an I/O command from a host (column 4, lines 44-50); generating an identifier that identifies a destination to which the I/O command is to be transmitted from the first storage unit (inherent to altering command for transmission to second storage, column 4, line 59, through column 5, line

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23); augmenting the I/O command with the generated identifier at the first storage unit (altering data and format for second storage unit, column 4, line 59, through column 5, line 23); and transmitting the augmented I/O command (column 4, lines 50-58).

6. With regards to claims 2, 12, and 22, Ohno teaches receiving the transmitted augmented I/O command at a second storage unit, wherein the second storage unit is associated with a second storage unit identifier (column 4, lines 50-58); determining, at the second storage unit, if the generated identifier that augmented the I/O command is the same as the second storage unit identifier (inherent to receipt and execution, column 4, lines 50-58); and executing the I/O command, at the second storage unit, in response to determining that the generated identifier that augmented the I/O command is the same as the second storage unit identifier (column 5, lines 24-32).

7. With regards to claims 4, 14, and 24, Ohno teaches the second storage unit is a second storage control unit, and wherein generating the identifier (altering data and format for second storage unit, column 4, line 59, through column 5, line 23) further comprises: associating with the identifier, a World Wide Node Name of the second storage control unit (switch numbers, column 6, lines 40-45); associating with the identifier, a World Wide Port Name of a port of a fibre channel adapter coupled to the second storage control unit, wherein the port is used for communications (port numbers, column 6, lines 40-45); and associating with the identifier, a storage subsystem identification of a storage subsystem coupled to the second storage control unit (logic volume identification, column 6, lines 1-35).

8. With regards to claims 5, 15, and 25, Ohno teaches the first storage unit is coupled to a first fibre channel adapter, wherein the destination is coupled to a second fibre channel adapter,

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wherein the first fibre channel adapter is coupled to the second fibre channel adapter via a switched fabric, and wherein the switched fabric includes a plurality of switches (through fibre channel switches, column 6, lines 40-65).

9. With regards to claims 6, 16, and 26, Ohno teaches the first storage unit is a primary storage control unit and the destination is a secondary storage control unit, and wherein the primary storage control unit is coupled to the secondary storage control unit (first controls sending to second, column 6, lines 1-35).

10. With regards to claims 7, 17, and 27, Ohno teaches receiving, at a storage unit, an I/O command, wherein the storage unit is associated with a storage unit identifier (column 4, lines 44-50); determining, at the storage unit, whether the I/O command is associated with an identifier that identifies a destination for which the I/O command is intended (ID recognition, column 6, lines 19-35); and determining, at the storage unit, whether the identifier is the same as the storage unit identifier, in response to determining that the identifier associated with the I/O command identifies the destination for which the I/O command is intended (ID correlation, column 6, lines 19-35).

11. With regards to claims 8, 18, and 28, Ohno teaches executing the I/O command, at the storage unit, in response to determining that the identifier is the same as the storage unit identifier (column 5, lines 24-32).

12. With regards to claims 10, 20, and 30, Ohno teaches the storage unit is a secondary storage control unit, and wherein the identifier (data and format for second storage unit, column 4, line 59, through column 5, line 23) further comprises: a World Wide Node Name of the secondary storage control unit (switch numbers, column 6, lines 40-45); a World Wide Port

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Name of a port of a fibre channel adapter coupled to the secondary storage control unit, wherein the port is used for communications (port numbers, column 6, lines 40-45); and a storage subsystem identification of a storage subsystem coupled to the secondary storage control unit (logic volume identification, column 6, lines 1-35).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 3, 9, 13, 19, 23, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 7,051,121 to Ohno et al. in further view of 6,820,168 to Tanaka et al.

15. With regards to claims 3, 13, and 23, Ohno teaches receiving the transmitted augmented I/O command at a second storage unit, wherein the second storage unit is associated with a second storage unit identifier (altering data and format for second storage unit, column 4, line 59, through column 5, line 23), but fails to teach failure generation in response to the identifiers not being the same. However, Tanaka teaches determining, at the second storage unit, if the generated identifier that augmented the I/O command is the same as the second storage unit identifier (column 7, lines 11-32); and generating a failure, at the second storage unit, in response to determining that the generated identifier that augmented the I/O command is not the same as the second storage unit identifier (column 8, lines 7-24). It would have been obvious to one of ordinary skill in the art at the time of inventions to combine the data routing of Ohno with the failure generation of Tanaka in order to prevent access errors.

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16. With regards to claims 9, 19, and 29, Ohno fails to teach, Tanaka teaches generating a failure, at the storage unit, in response to determining that the identifier is not the same as the as the storage unit identifier (column 8, lines 7-24). It would have been obvious to one of ordinary skill in the art at the time of inventions to combine the data routing of Ohno with the failure generation of Tanaka in order to prevent access errors.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 6,453,392 to Flynn, Jr. teaches ID comparison for determination of whether execution is proper or not.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua D. Schneider whose telephone number is (571) 272-4158. The examiner can normally be reached on M, T, Th, and F, 9-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JDS

TANH Q NGUYEN
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Tanh Q. Nguyen
March 30, 2007